

submitted for approval to the Officer in Charge, Marine Inspection, in the district where the installation is being made.

(2) Provision shall be made in foundations for expansion of the boilers when heated.

(3) Boilers shall be provided with chocks to prevent movement in the event of collision unless a bolted or riveted construction satisfactorily provides for this contingency.

(b) *Protection of adjacent structure.* (1) Boilers shall be so placed that all parts are readily accessible for inspection and repair.

(2) In vessels having a double bottom or other extensive surfaces directly below the boiler, the distance between such surface and a boiler shall in no case be less than 18 inches at the lowest part.

(3) In certain types of vessels where the boiler foundation forms the ashpit, such foundations shall be efficiently ventilated, except in cases where the ashpit is partially filled with water at all times.

(4) The pans of oil-burning, watertube boilers shall be arranged to prevent oil from leaking into the bilges and shall be lined with firebrick or other heat resisting material.

(5) The distance between a boiler and a compartment containing fuel oil shall not be less than 24 inches at the back end of a boiler and 18 inches elsewhere, except that for a cylindrical part of a boiler or a knuckle in the casing of a water-tube boiler, these distances may be reduced to 18 inches, provided all parts are readily accessible for inspection and repair.

(6) All oil-burning boilers shall be provided with oiltight drip pans under the burners and elsewhere as necessary to prevent oil draining into the bilges.

(c) *Boiler uptakes.* (1) Where dampers are installed in the uptakes or funnels, the arrangement shall be such that it will not be possible to shut off the gas passages from the operating boilers.

(2) Each main power boiler and auxiliary boiler shall be fitted with a separate gas passage.

§ 52.01-135 Inspection and tests (modifies PG-90 through PG-100).

(a) *Requirements.* Inspection and test of boilers and boiler pressure parts shall be as indicated in PG-90 through PG-100 of the ASME Code except as noted otherwise in this section.

(b) The inspections required by PG-90 through PG-100 of the ASME Code shall be performed by the "Authorized Inspector" as defined in PG-91 of the ASME Code. The Authorized Inspector shall hold a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors. After installation, boilers will be inspected for compliance with this part by the "Marine Inspector" as defined in § 50.10-15 of this subchapter.

(c) *Hydrostatic test (modifies PG-99).* Each new boiler shall be hydrostatically tested after installation to 1½ times the maximum allowable working pressure as indicated in PG-99 of the ASME Code. Before the boilers are insulated, accessible parts of the boiler shall be emptied, opened up and all interior surfaces shall be examined by the marine inspector to ascertain that no defects have occurred due to the hydrostatic test.

(d) *Operating tests.* In addition to hydrostatic tests prescribed in paragraph (c) of this section, automatically controlled auxiliary boilers must be subjected to operating tests as specified in §§ 61.30-20, 61.35-1, 61.35-3, 62.30-10, 63.15-9, 63.25-3, and 63.25-5 of this chapter, as appropriate, or as directed by the Officer in Charge, Marine Inspection, for propulsion boilers. These tests are to be performed after final installation.

[CGFR 68-82, 33 FR 18815, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9976, June 17, 1970; CGD 81-79, 50 FR 9433, Mar. 8, 1985; CGD 88-057, 55 FR 24236, June 15, 1990]

§ 52.01-140 Certification by stamping (modifies PG-104 through PG-113).

(a) All boilers built in accordance with this part must be stamped with the appropriate ASME Code symbol as required by PG-104 through PG-113 of the ASME Code.

(b)(1) Upon satisfactory completion of the tests and Coast Guard inspections, boilers must be stamped with the following:

(i) Manufacturer's name and serial number;

(ii) ASME Code Symbol;

(iii) Coast Guard symbol, which is affixed only by marine inspector (see § 50.10–15 of this subchapter);

(iv) Maximum allowable working pressure _____ at _____ °C (°F); and

(v) Boiler rated steaming capacity in kilograms (pounds) per hour (rated joules (B.T.U.) per hour output for high temperature water boilers).

(2) The information required in paragraph (b)(1) of this section must be located on:

(i) The front head or shell near the normal waterline and within 610 mm (24 inches) of the front of firetube boilers; and

(ii) The drum head of water tube boilers.

(3) Those heating boilers which are built to section I of the ASME Code, as permitted by § 53.01–10(e) of this subchapter, do not require Coast Guard stamping and must receive full ASME stamping including the appropriate code symbol.

(c) The data shall be legibly stamped and shall not be obliterated during the life of the boiler. In the event that the portion of the boiler upon which the data is stamped is to be insulated or otherwise covered, a metal nameplate as described in PG–106.6 of the ASME Code shall be furnished and mounted. The nameplate is to be maintained in a legible condition so that the data may be easily read.

(d) Safety valves shall be stamped as indicated in PG–110 of the ASME Code.

[CGD 81–79, 50 FR 9433, Mar. 8, 1985]

§ 52.01–145 Manufacturers' data report forms (modifies PG–112 and PG–113).

The manufacturers' data report forms required by PG–112 and PG–113 of the ASME Code must be made available to the marine inspector for review. The Authorized Inspector's National Board commission number must be included on the manufacturers' data report forms.

[CGD 81–79, 50 FR 9434, Mar. 8, 1985]

Subpart 52.05—Requirements for Boilers Fabricated by Welding

§ 52.05–1 General (modifies PW–1 through PW–54).

(a) Boilers and component parts, including piping, that are fabricated by welding shall be as indicated in PW–1 through PW–54 of the ASME Code except as noted otherwise in this subpart.

§ 52.05–15 Heat treatment (modifies PW–10).

(a) Vessels and vessel parts shall be preheated and postweld heat treated in accordance with PW–38 and PW–39 of the ASME Code (reproduces PW–10). This includes boiler parts made of pipe material even though they may be non-destructively examined under § 52.05–20.

§ 52.05–20 Radiographic and ultrasonic examination (modifies PW–11 and PW–41.1).

Radiographic and ultrasonic examination of welded joints shall be as described in PW–11 of the ASME Code except that parts of boilers fabricated of pipe material, such as drums, shells, downcomers, risers, cross pipes, headers and tubes containing only circumferentially welded butt joints, shall be nondestructively examined as required by § 56.95–10 of this subchapter even though they may be exempted by the size limitations specified in PW–11.1.2 and PW–41.1 of the ASME Code.

[CGD 81–79, 50 FR 9434, Mar. 8, 1985]

§ 52.05–30 Minimum requirements for attachment welds (modifies PW–16).

(a) The location and minimum size of attachment welds for nozzles and other connections shall be as required by PW–16 of the ASME Code except as noted otherwise in this section.

(b) When nozzles or couplings are attached to boilers, as shown in Figure PW–16 (a) and (c) of the ASME Code and are welded from one side only, backing strips shall be used unless it can be determined visually or by acceptable nondestructive test methods that complete penetration has been obtained.

(c) When attachments as shown in Figure PW–16 (y) and (z) of the ASME